

### ABSTRACT OF THE DISCLOSURE

An apparatus for generating quadrature phase signals in a half-rate data recovery circuit, which is adapted to generate a first and a second clock signals having the same frequency and being 90 degrees out of phase with each other.

5 The apparatus for generating quadrature phase signals mainly comprises a base selector, a first phase interpolator and a second phase interpolator. The base selector generates, based on a region control signal, a pair

10 of phase region boundaries for the first clock signal as well as a pair of phase region boundaries for the second clock signal by using a plurality of reference clock signals. The first and second phase interpolators perform, based on

15 a position control signal, weighted average processes for the two pairs of phase region boundaries, respectively, to thereby obtain the first and the second clock signals.